

Description of Additional Supplementary Files

File Name: Supplementary Data 1

Description: Expression profile of clustered gene groups by RNA sequencing. Table contains degraded maternal mRNAs, stable maternal mRNAs and zygotically expressed mRNAs.

File Name: Supplementary Data 2

Description: Differential gene expression analysis. Table lists differentially expressed genes in *mettl3-14*^(M-,Z+) and *fmr1*^(M-,Z+).

File Name: Supplementary Data 3

Description: The m6A datasets of embryos at the 0–1-hour and 5–6-hour stages.

File Name: Supplementary Data 4

Description: Proteomics Data. Table lists the mass spectrometry proteomics data generated in this study.